## **Case Study**

**MEDICATION MANAGEMENT SYSTEM – HEALTHCARE** 











The customer, a winner of MiTX Tech award, wanted to develop a new approach for medication adherence among patients through reminders, social feedbacks, and automated refills – ensuring that patients never miss a dosage. Ever!

AFL worked with the customer to develop a simple solution that helped keep track of how many times a patient has actually taken medicines prescribed by the hospital against a given schedule. The system would also feature multiple reminders; in case of non-adherence, featuring – visual (glow light), audio (beep sound) and email / telephone reminders – based on fixed time intervals.

AFL's team provided end-to-end product engineering services from idea to concept and finally development and testing of the product.

AFL's team provided the following services that featured:

- ✓ Hardware design (for base station and pill box)
- ✓ Firmware design and development ( for base station and pill box)
- ✓ Communication protocol design and implementation featuring RFID between base station and pill box and GSM between base station and hospital application
- ✓ Test and production automation, of both firmware and hardware (Devices)
- ✓ High-Level Data Security, conforming to HIPPA
- ✓ Mobile Integration
- ✓ Server-side programming for connectivity between base station and application

Industry	Healthcare
End users	200,000+ users
Team size	6 people
Duration	12 months

## ACCEL FRONTLINE

Familv

**BASE STATION** 

Caregivers

EPHONE - SMS

WEB APPLICATION

RFID





**Logical Architecture** 

Hospitals /

**PILL BOX** 

Doctors

Pharmacy

C, AVR Studio, JTAG toolkit, Salesforce, Python, VC++ , Production test jigs

- ✓ Reduced cost of product engineering by leveraging offshore
- ✓ Reduced Go-to-Market time by integrated hardware, software and firmware testing by test automation jigs – ensured a more robust and quality product
- ✓ Increased patience adherence from around 70 % to more than 95%

CAC Holdings Corporation

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